U.S. Department of Agriculture
Natural Resources Conservation Service

MT-ENG-21D
Rev. 12/02

LATERAL STOCKWATER PIPELINE
HYDRAULIC COMPUTATION WORKSHEET

Land user _____ Field Office _____
Job description _____
Location _____
Planner _____ Date _____ Checked by _____ Date _____

(1) Station	(2) Reach Length (ft)	(3) Pipe Elev.	(4) Design Flow Rate (gpm)	(5) Nominal Pipe Diameter (in)	(6) Pipe Type	(7) Pipe Pressure Rating (psi)	(8) Friction Factor H_f/100ft (ft/100)	(9) Reach Total H_f (ft) (2)/100 x (8)	(10) HGL Elev. (from CP elev)	(11) Max. Pressure on Pipe (psi) (10) - (3) x .433	Comments
											at main

LATERAL STOCKWATER PIPELINE
HYDRAULIC COMPUTATION WORKSHEET

Land user_____

Job description_____

Farm No._____ Date_____ Checked by_____ Date_____

Designer_____ Date_____ Checked by_____ Date_____

HGL at mainline _____

Pump OFF elevation (Automatic pressure system only) _____

Flow in lateral - OFF elevation (manual, timed or gravity) _____

Critical point along lateral (CP): Station _____ Elevation _____

Clearance Head (CH) at critical point: _____ ft x .433 = _____ psi

Minimum required HGL at CP = CP elevation + CH ft = _____ + _____ = _____